

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/647, S19A
Source: IFW/6
Date Processed by STIC: 12-28-04

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 12/28/2004

PATENT APPLICATION: US/10/647,519A

TIME: 09:46:15

Input Set : A:\269.revseqlist.txt

Output Set: N:\CRF4\12282004\J647519A.raw

(pg. 6)

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3 <110> APPLICANT: Fainzilber, Michael M.
4   Kits, Karel S.
5   Burlingame, Alma L.
6   Olivera, Baldomero M.
7   Walker, Craig
8   Watkins, Maren
9   Shetty, Reshma
10  Cruz, Lourdes J.
11  Imperial, Julita
12  Colledge, Clark
13  University of Utah Resarch Foundation
14  Vrije Universiteit
15  Regents of the University of California
17 <120> TITLE OF INVENTION: Gamma-Conopeptides
19 <130> FILE REFERENCE: 2314-269
21 <140> CURRENT APPLICATION NUMBER: US 10/647,519A
22 <141> CURRENT FILING DATE: 2003-08-26
24 <150> PRIOR APPLICATION NUMBER: US 09/210,952
25 <151> PRIOR FILING DATE: 1998-12-15
27 <150> PRIOR APPLICATION NUMBER: US 60/069,706
28 <151> PRIOR FILING DATE: 1997-12-16
30 <160> NUMBER OF SEQ ID NOS: 47
32 <170> SOFTWARE: PatentIn Ver. 2.0
34 <210> SEQ ID NO: 1
35 <211> LENGTH: 42
36 <212> TYPE: PRT
37 <213> ORGANISM: Artificial Sequence
39 <220> FEATURE:
40 <223> OTHER INFORMATION: Description of Artificial Sequence: generic formula
41   of gamma-conopeptides
43 <220> FEATURE:
44 <221> NAME/KEY: PEPTIDE
45 <222> LOCATION: (1)..(13)
46 <223> OTHER INFORMATION: Xaa at residues 1, 2, 3, 4, 5, and 6 may be
47   des-Xaa or any amino acid; Xaa at residues 8, 9,
48   10, 11 and 12 may be any amino acid; Xaa at
49   residue 13 may be des-Xaa or any amino acid.
51 <220> FEATURE:
52 <221> NAME/KEY: PEPTIDE
53 <222> LOCATION: (15)..(19)
54 <223> OTHER INFORMATION: Xaa at residues 15, 16, 17 and 18 may be any amino
55   acid; Xaa at residue 19 is Glu,
56   gamma-carboxyglutamate or Gln.

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58 <220> FEATURE:
59 <221> NAME/KEY: PEPTIDE
60 <222> LOCATION: (22)..(28)
61 <223> OTHER INFORMATION: Xaa at residues 22, 23 and 24 may be any amino
62     acid; Xaa at residue 25 may be des-Xaa or any
63     amino acid; Xaa at residues 27, 28 and 29 may be
64     any amino acid.
66 <220> FEATURE:
67 <221> NAME/KEY: PEPTIDE
68 <222> LOCATION: (30)..(42)
69 <223> OTHER INFORMATION: Xaa at residues 30, 31 and 32 may be des-Xaa or
70     any amino acid; Xaa at residues 34, 35, 36, 37,
71     38, 39, 40, 41 and 42 may be des-Xaa or any amino
72     acid.
74 <400> SEQUENCE: 1
W--> 75 Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa
76     1           5           10          15
78 Xaa Xaa Xaa Cys Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa
79           20           25           30
81 Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
82     35           40
85 <210> SEQ ID NO: 2
86 <211> LENGTH: 42
87 <212> TYPE: PRT
88 <213> ORGANISM: Artificial Sequence
90 <220> FEATURE:
91 <223> OTHER INFORMATION: Description of Artificial Sequence: generic
92     sequence of gamma-conopeptides.
94 <220> FEATURE:
95 <221> NAME/KEY: PEPTIDE
96 <222> LOCATION: (1)..(13)
97 <223> OTHER INFORMATION: Xaa at residues 1, 2, 3, 4, 5 and 6 may be des-Xaa
98     or any amino acid; Xaa at residues 8, 9, 10, 11
99     and 12 may be any amino acid; Xaa at residue 13
100     may be des-Xaa or any amino acid.
102 <220> FEATURE:
103 <221> NAME/KEY: PEPTIDE
104 <222> LOCATION: (15)..(22)
105 <223> OTHER INFORMATION: Xaa at residues 15, 16, 17 and 18 may be any amino
106     acid; Xaa at residue 19 is Glu,
107     gamma-carboxyglutamate or Gln; Xaa at residue 22
108     is Ser or Thr.
110 <220> FEATURE:
111 <221> NAME/KEY: PEPTIDE
112 <222> LOCATION: (23)..(29)
113 <223> OTHER INFORMATION: Xaa at residues 23 and 24 may be any amino acid;
114     Xaa at residue 25 may be des-Xaa or any amino
115     acid; Xaa at residues 27, 28 and 29 may be any
116     amino acid.

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118 <220> FEATURE:
119 <221> NAME/KEY: PEPTIDE
120 <222> LOCATION: (30)..(42)
121 <223> OTHER INFORMATION: Xaa at residues 30, 31 and 32 may be des-Xaa or
122     any amino acid; Xaa at residues 34, 35, 36, 37,
123     38, 39, 40, 41 and 42 may be des-Xaa or any amino
124     acid.
126 <400> SEQUENCE: 2
W--> 127 Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa
128     1           5           10           15
130 Xaa Xaa Xaa Cys Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa
131           20           25           30
133 Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
134           35           40
137 <210> SEQ ID NO: 3
138 <211> LENGTH: 39
139 <212> TYPE: PRT
140 <213> ORGANISM: Artificial Sequence
142 <220> FEATURE:
143 <223> OTHER INFORMATION: Description of Artificial Sequence: generic formula
144     of gamma-conopeptides
146 <220> FEATURE:
147 <221> NAME/KEY: PEPTIDE
148 <222> LOCATION: (1)..(13)
149 <223> OTHER INFORMATION: Xaa at residue 1 is any amino acid; Xaa at
150     residues 2, 3, 4, 5 and 6 may be des-Xaa or any
151     amino acid; Xaa at residues 8, 9, 10, 11, 12 and
152     13 may be any amino acid.
154 <220> FEATURE:
155 <221> NAME/KEY: PEPTIDE
156 <222> LOCATION: (27)..(39)
157 <223> OTHER INFORMATION: Xaa at residues 27, 28, 29, 31, 32, 33, 34, 35, 36
158     and 37 may be any amino acid; Xaa at residues 38
159     and 39 may be des-Xaa or any amino acid.
161 <220> FEATURE:
162 <221> NAME/KEY: PEPTIDE
163 <222> LOCATION: (15)..(19)
164 <223> OTHER INFORMATION: Xaa at residues 15, 16, 17 and 18 may be any amino
165     acid; Xaa at residue 19 is Glu or
166     gamma-carboxyglutamate.
168 <400> SEQUENCE: 3
W--> 169 Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa
170     1           5           10           15
172 Xaa Xaa Xaa Cys Cys Ser Asn Ser Cys Asp Xaa Xaa Xaa Cys Xaa Xaa
173           20           25           30
175 Xaa Xaa Xaa Xaa Xaa Xaa Xaa
176           35
179 <210> SEQ ID NO: 4
180 <211> LENGTH: 39

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181 <212> TYPE: PRT
182 <213> ORGANISM: Artificial Sequence
184 <220> FEATURE:
185 <223> OTHER INFORMATION: Description of Artificial Sequence: generic
186     sequence of gamma-conopeptides.
188 <220> FEATURE:
189 <221> NAME/KEY: PEPTIDE
190 <222> LOCATION: (1)..(13)
191 <223> OTHER INFORMATION: Xaa at residue 1 is any amino acid; Xaa at
192     residues 2, 3, 4, 5 and 6 may be des-Xaa or any
193     amino acid; Xaa at residues 8, 9, 10, 11, 12 and
194     13 may be any amino acid.
196 <220> FEATURE:
197 <221> NAME/KEY: PEPTIDE
198 <222> LOCATION: (15)..(19)
199 <223> OTHER INFORMATION: Xaa at residue 15 is Ser or Thr; Xaa at residues
200     16, 17 and 18 may be any amino acid; Xaa at
201     residue 19 is Glu or gamma-carboxyglutamate.
203 <220> FEATURE:
204 <221> NAME/KEY: PEPTIDE
205 <222> LOCATION: (27)..(39)
206 <223> OTHER INFORMATION: Xaa at residues 27, 28, 29, 31, 32, 33, 34, 35, 36
207     and 37 may be any amino acid; Xaa at residues 38
208     and 39 may be des-Xaa or any amino acid.
210 <400> SEQUENCE: 4
W--> 211 Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa
      212   1           5           10           15
      214 Xaa Xaa Xaa Cys Cys Ser Asn Ser Cys Asp Xaa Xaa Xaa Cys Xaa Xaa
      215           20           25           30
      217 Xaa Xaa Xaa Xaa Xaa Xaa Xaa
      218           35
      221 <210> SEQ ID NO: 5
      222 <211> LENGTH: 34
      223 <212> TYPE: PRT
      224 <213> ORGANISM: Artificial Sequence
      226 <220> FEATURE:
      227 <223> OTHER INFORMATION: Description of Artificial Sequence: generic
      228     sequence of gamma-conopeptides.
      230 <220> FEATURE:
      231 <221> NAME/KEY: PEPTIDE
      232 <222> LOCATION: (1)..(6)
      233 <223> OTHER INFORMATION: Xaa at residues 1 and 2 may be des-Xaa or any
      234     amino acid; Xaa at residue 3 is Asp, Glu or
      235     gamma-carboxyglutamate; Xaa at residues 5 and 6
      236     may be any amino acid.
      238 <220> FEATURE:
      239 <221> NAME/KEY: PEPTIDE
      240 <222> LOCATION: (7)..(16)
      241 <223> OTHER INFORMATION: Xaa at residue 7 is Trp or 6-bromo-Trp; Xaa at

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242 residues 9, 10, 13 and 14 may be any amino acid;
 243 Xaa at residue 16 is Glu or
 244 gamma-carboxyglutamate.
 246 <220> FEATURE:
 247 <221> NAME/KEY: PEPTIDE
 248 <222> LOCATION: (28)..(34)
 249 <223> OTHER INFORMATION: Xaa at residues 28, 30, 31, 32, 33 and 34 may be
 250 any amino acid.
 252 <400> SEQUENCE: 5
W--> 253 Xaa Xaa Xaa Cys Xaa Xaa Xaa Phe Xaa Xaa Cys Thr Xaa Xaa Ser Xaa
 254 1 5 10 15
 256 Cys Cys Ser Asn Ser Cys Asp Gln Thr Tyr Cys Xaa Leu Xaa Xaa Xaa
 257 20 25 30
 259 Xaa Xaa
 262 <210> SEQ ID NO: 6
 263 <211> LENGTH: 32
 264 <212> TYPE: PRT
 265 <213> ORGANISM: Conus pennaceus
 267 <220> FEATURE:
 268 <221> NAME/KEY: PEPTIDE
 269 <222> LOCATION: (1)..(31)
 270 <223> OTHER INFORMATION: Xaa at residue 5 is Trp or 6-bromo-Trp; Xaa at
 271 residues 14 and 26 are Glu or
 272 gamma-carboxyglutamate; Xaa at residue 31 is Pro
 273 or hydroxy-Pro.
 275 <400> SEQUENCE: 6
W--> 276 Asp Cys Thr Ser Xaa Phe Gly Arg Cys Thr Val Asn Ser Xaa Cys Cys
 277 1 5 10 15
 279 Ser Asn Ser Cys Asp Gln Thr Tyr Cys Xaa Leu Tyr Ala Phe Xaa Ser
 280 20 25 30
 283 <210> SEQ ID NO: 7
 284 <211> LENGTH: 34
 285 <212> TYPE: PRT
 286 <213> ORGANISM: Conus textile
 288 <220> FEATURE:
 289 <221> NAME/KEY: PEPTIDE
 290 <222> LOCATION: (1)..(34)
 291 <223> OTHER INFORMATION: Xaa at residues 1, 7 and 34 are Trp or
 292 6-bromo-Trp; Xaa at residues 3 and 16 are Glu or
 293 gamma-carboxyglutamate; Xaa at residues 31 and 32
 294 are Pro or hydroxy-Pro.
 296 <400> SEQUENCE: 7
W--> 297 Xaa Leu Xaa Cys Ser Val Xaa Phe Ser His Cys Thr Lys Asp Ser Xaa
 298 1 5 10 15
 300 Cys Cys Ser Asn Ser Cys Asp Gln Thr Tyr Cys Thr Leu Met Xaa Xaa
 301 20 25 30
 303 Asp Xaa
 306 <210> SEQ ID NO: 8
 307 <211> LENGTH: 39

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/647,519A

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 22, 23, 24, 25, 27
 Seq#:1; Xaa Pos. 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42
 Seq#:2; Xaa Pos. 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 22, 23, 24, 25, 27
 Seq#:2; Xaa Pos. 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42
 Seq#:3; Xaa Pos. 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 27, 28, 29, 31, 32
 Seq#:3; Xaa Pos. 33, 34, 35, 36, 37, 38, 39
 Seq#:4; Xaa Pos. 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 27, 28, 29, 31, 32
 Seq#:4; Xaa Pos. 33, 34, 35, 36, 37, 38, 39
 Seq#:5; Xaa Pos. 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 14, 16, 28, 30, 31, 32, 33, 34
 Seq#:6; Xaa Pos. 5, 14, 26, 31
 Seq#:7; Xaa Pos. 1, 3, 7, 15, 31, 32, 34
 Seq#:8; Xaa Pos. 1, 2, 4, 10, 19, 31, 34, 36, 37, 39
 Seq#:9; Xaa Pos. 9, 13, 17
 Seq#:10; Xaa Pos. 2, 3, 10, 12, 18, 26, 32, 33
 Seq#:11; Xaa Pos. 3, 5, 16, 18, 22, 25, 31
 Seq#:12; Xaa Pos. 1, 5, 8, 11
 Seq#:13; Xaa Pos. 5, 8, 10, 15, 16, 23
 Seq#:14; Xaa Pos. 4, 9, 12, 13, 17
 Seq#:15; Xaa Pos. 8, 15, 16
 Seq#:24; N Pos. 17
 Seq#:36; Xaa Pos. 3, 7, 8, 14, 18
 Seq#:37; Xaa Pos. 1
 Seq#:39; N Pos. 12
 Seq#:41; N Pos. 6, 9, 12, 15, 18, 21, 24
 Seq#:42; Xaa Pos. 14, 26, 31
 Seq#:43; Xaa Pos. 9, 13
 Seq#:44; Xaa Pos. 2
 Seq#:45; Xaa Pos. 1, 6, 7, 8, 12, 17, 18, 23

VERIFICATION SUMMARY

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L:75 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
M:341 Repeated in SeqNo=1
L:127 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
M:341 Repeated in SeqNo=2
L:169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
M:341 Repeated in SeqNo=3
L:211 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
M:341 Repeated in SeqNo=4
L:253 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
M:341 Repeated in SeqNo=5
L:276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
M:341 Repeated in SeqNo=6
L:297 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
M:341 Repeated in SeqNo=7
L:320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
M:341 Repeated in SeqNo=8
L:342 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
M:341 Repeated in SeqNo=9
L:363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
M:341 Repeated in SeqNo=10
L:386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
M:341 Repeated in SeqNo=11
L:406 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:427 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
M:341 Repeated in SeqNo=13
L:447 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
M:341 Repeated in SeqNo=14
L:467 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:733 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
L:1090 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0
M:341 Repeated in SeqNo=36
L:1112 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0
L:1145 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0
L:1179 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:0
L:1195 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0
M:341 Repeated in SeqNo=42
L:1214 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0
L:1232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0
L:1249 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:0
M:341 Repeated in SeqNo=45